



OIEP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/029,314

DATE: 02/12/2002
TIME: 08:45:08

Input Set : N:\Crf3\RULE60\10029314.txt
Output Set: N:\CRF3\02122002\J029314.raw

3 <110> APPLICANT: Salon et al, John A.
5 <120> TITLE OF INVENTION: DNA Encoding A Human Melanin Concentrating Hormone
6 Receptor (MCH1) And Uses Thereof
8 <130> FILE REFERENCE: 1795/57453-C/JPW
10 <140> CURRENT APPLICATION NUMBER: 10/029,314
11 <141> CURRENT FILING DATE: 2001-12-20
13 <150> PRIOR APPLICATION NUMBER: 09/899,732
14 <151> PRIOR FILING DATE: 2001-07-05
16 <150> PRIOR APPLICATION NUMBER: 09/610,635
17 <151> PRIOR FILING DATE: 2000-07-05
19 <160> NUMBER OF SEQ ID NOS: 28
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 1269
25 <212> TYPE: DNA
26 <213> ORGANISM: Homo sapiens
28 <400> SEQUENCE: 1
29 atgtcagtgg gagccatgaa gaagggagtg gggagggcag ttgggcttgg aggcggcagc 60
30 ggctgccagg ctacggagga agaccccctt cccgactgcg gggcttgcgc tccgggacaa 120
31 ggtggcaggc gctggaggct gccgcagcct gcgtgggtgg aggggagctc agctcggttg 180
32 tgggagcagg cgaccggcac tggctggatg gacctggaag cctcgtctgt gccactgggt 240
33 cccaatgcca gcaacacctc tgatggcccc gataacctca cttcagcagg atcacctcct 300
34 cgcacgggga gcatctccta catcaacatc atcatgcctt cgggtgttcgg caccatctgc 360
35 ctccctgggca tcatcgggaa ctccacggtc atcttcggcg tcgtgaagaa gtccaagctg 420
36 cactggtgca acaacgtccc cgacatcttc atcatcaacc tctcggtagt agatctcctc 480
37 tttctcctgg gcatgccctt catgatccac cagctcatgg gcaatggggg gtggcacttt 540
38 ggggagacca tgtgcacct catcacggcc atggatgcca atagtcagtt caccagcacc 600
39 tacatcctga ccgccatggc cattgaccgc tacctggcca ctgtccaccc catctcttcc 660
40 acgaagttcc ggaagccctc tgtggccacc ctggtgatct gcctcctgtg ggccctctcc 720
41 ttcacacgca tcacccctgt gtggctgtat gccagactca tccccttccc aggaggtgca 780
42 gtgggctgcg gcatacgccct gcccaaccca gacactgacc tctactggtt caccctgtac 840
43 cagtttttcc tggcctttgc cctgcctttt gtggtcatca cagccgcata cgtgaggatc 900
44 ctgcagcgca tgaagtcctc agtggccccc gcctcccagc gcagcatccg gctgcggaca 960
45 aagaggggtga ccgcacagc catcgccatc tgtctggtct tctttgtgtg ctgggcaccc 1020
46 tactatgtgc tacagctgac ccagttgtcc atcagccgcc cgaccctcac ctttgtctac 1080
47 ttatacaatg cggccatcag cttgggctat gccaacagct gcctcaaccc ctttgtgtac 1140
48 atcgtgctct gtgagacggt ccgcaaacgc ttggtcctgt cgggtgaagcc tgcagcccag 1200
49 gggcagcttc gcgctgtcag caacgctcag acggctgacg aggagaggac agaaagcaaa 1260
50 ggcaacctga 1269
53 <210> SEQ ID NO: 2
54 <211> LENGTH: 422
55 <212> TYPE: PRT
56 <213> ORGANISM: Homo sapiens

ENTERED

RAW SEQUENCE LISTING

DATE: 02/12/2002

PATENT APPLICATION: US/10/029,314

TIME: 08:45:08

Input Set : N:\Crf3\RULE60\10029314.txt

Output Set: N:\CRF3\02122002\J029314.raw

58 <400> SEQUENCE: 2

```

59 Met Ser Val Gly Ala Met Lys Lys Gly Val Gly Arg Ala Val Gly Leu
60   1           5           10           15
62 Gly Gly Gly Ser Gly Cys Gln Ala Thr Glu Glu Asp Pro Leu Pro Asp
63           20           25           30
65 Cys Gly Ala Cys Ala Pro Gly Gln Gly Gly Arg Arg Trp Arg Leu Pro
66           35           40           45
68 Gln Pro Ala Trp Val Glu Gly Ser Ser Ala Arg Leu Trp Glu Gln Ala
69           50           55           60
71 Thr Gly Thr Gly Trp Met Asp Leu Glu Ala Ser Leu Leu Pro Thr Gly
72   65           70           75           80
74 Pro Asn Ala Ser Asn Thr Ser Asp Gly Pro Asp Asn Leu Thr Ser Ala
75           85           90           95
77 Gly Ser Pro Pro Arg Thr Gly Ser Ile Ser Tyr Ile Asn Ile Ile Met
78           100          105          110
80 Pro Ser Val Phe Gly Thr Ile Cys Leu Leu Gly Ile Ile Gly Asn Ser
81           115          120          125
83 Thr Val Ile Phe Ala Val Val Lys Lys Ser Lys Leu His Trp Cys Asn
84           130          135          140
86 Asn Val Pro Asp Ile Phe Ile Ile Asn Leu Ser Val Val Asp Leu Leu
87 145           150           155           160
89 Phe Leu Leu Gly Met Pro Phe Met Ile His Gln Leu Met Gly Asn Gly
90           165           170           175
92 Val Trp His Phe Gly Glu Thr Met Cys Thr Leu Ile Thr Ala Met Asp
93           180           185           190
95 Ala Asn Ser Gln Phe Thr Ser Thr Tyr Ile Leu Thr Ala Met Ala Ile
96           195           200           205
98 Asp Arg Tyr Leu Ala Thr Val His Pro Ile Ser Ser Thr Lys Phe Arg
99           210           215           220
101 Lys Pro Ser Val Ala Thr Leu Val Ile Cys Leu Leu Trp Ala Leu Ser
102 225           230           235           240
104 Phe Ile Ser Ile Thr Pro Val Trp Leu Tyr Ala Arg Leu Ile Pro Phe
105           245           250           255
107 Pro Gly Gly Ala Val Gly Cys Gly Ile Arg Leu Pro Asn Pro Asp Thr
108           260           265           270
110 Asp Leu Tyr Trp Phe Thr Leu Tyr Gln Phe Phe Leu Ala Phe Ala Leu
111           275           280           285
113 Pro Phe Val Val Ile Thr Ala Ala Tyr Val Arg Ile Leu Gln Arg Met
114           290           295           300
116 Thr Ser Ser Val Ala Pro Ala Ser Gln Arg Ser Ile Arg Leu Arg Thr
117 305           310           315           320
119 Lys Arg Val Thr Arg Thr Ala Ile Ala Ile Cys Leu Val Phe Phe Val
120           325           330           335
122 Cys Trp Ala Pro Tyr Tyr Val Leu Gln Leu Thr Gln Leu Ser Ile Ser
123           340           345           350
125 Arg Pro Thr Leu Thr Phe Val Tyr Leu Tyr Asn Ala Ala Ile Ser Leu
126           355           360           365
128 Gly Tyr Ala Asn Ser Cys Leu Asn Pro Phe Val Tyr Ile Val Leu Cys
129           370           375           380

```

RAW SEQUENCE LISTING

DATE: 02/12/2002

PATENT APPLICATION: US/10/029,314

TIME: 08:45:08

Input Set : N:\Crif3\RULE60\10029314.txt

Output Set: N:\CRF3\02122002\J029314.raw

```

131 Glu Thr Phe Arg Lys Arg Leu Val Leu Ser Val Lys Pro Ala Ala Gln
132 385                      390                      395                      400
134 Gly Gln Leu Arg Ala Val Ser Asn Ala Gln Thr Ala Asp Glu Glu Arg
135                      405                      410                      415
137 Thr Glu Ser Lys Gly Thr
138                      420
141 <210> SEQ ID NO: 3
142 <211> LENGTH: 1214
143 <212> TYPE: DNA
144 <213> ORGANISM: Rattus norvegicus
146 <400> SEQUENCE: 3
147 gcaggcgacc tgcaccggct gcatggatct gcaaacctcg ttgctgtcca ctggcccca 60
148 tgccagcaac atctccgatg gccaggataa tctcacattg ccgggggtcac ctccctcgac 120
149 agggagtgtc tctacatca acatcattat gccttccgtg tttggtacca tctgtctcct 180
150 gggcatcggt ggaaactcca cggatcatct tgcgtgtggt aagaagtcca agctacactg 240
151 gtgcagcaac gtccccgaca tcttcatcat caacctctct gtggtggatc tgccttctct 300
152 gctgggcatg cctttcatga tccaccagct catggggaac ggcgtctggc actttgggga 360
153 aaccatgtgc accctcatca cagccatgga cgccaacagt cagttcacta gcacctacat 420
154 cctgactgcc atgaccattg accgctactt ggccaccgtc caccctctct cctccacca 480
155 gttccggaag cctccatgg ccacctggt gatctgcctc ctgtgggcgc tctccttcat 540
156 cagtatcacc cctgtgtggc tctacgccag gctcattccc ttcccagggg gtgctgtggg 600
157 ctgtggcatc cgccgtccaa acccggacac tgacctctac tggttcactc tgtaccagtt 660
158 tttcctggcc tttgcccttc cgtttgtggt cattaccgcc gcatacgtga aaatactaca 720
159 gcgcatgacg tcttcggtgg cccagcctc ccaacgcagc atccggcttc ggacaaagag 780
160 ggtgacccgc acggccattg ccattctgtc ggtcttcttt gtgtgctggg caccctacta 840
161 tgtgctgcag ctgaccacgc tgtccatcag ccgcccgacc ctacagtttg tctacttgta 900
162 caacgcggcc atcagcttgg gctatgctaa cagctgcctg aacccttttg tgtacatagt 960
163 gctctgtgag acctttcgaa aacgcttggg gttgtcagtg aagcctgcag cccaggggca 1020
164 gctccgcacg gtcagcaacg ctccagacgc tgatgaggag aggacagaaa gcaaaggcac 1080
165 ctgacaatc cccagtcgcc tccaagtcag gccaccccat caaacctggg ggagagatac 1140
166 tgagattaaa cccaaggcta ccctgggaga atgcagaggc tggaggctgg gggctttag 1200
167 caaccacatt ccac 1214
170 <210> SEQ ID NO: 4
171 <211> LENGTH: 353
172 <212> TYPE: PRT
173 <213> ORGANISM: Rattus norvegicus
175 <400> SEQUENCE: 4
176 Met Asp Leu Gln Thr Ser Leu Leu Ser Thr Gly Pro Asn Ala Ser Asn
177 1 5 10 15
179 Ile Ser Asp Gly Gln Asp Asn Leu Thr Leu Pro Gly Ser Pro Pro Arg
180 20 25 30
182 Thr Gly Ser Val Ser Tyr Ile Asn Ile Ile Met Pro Ser Val Phe Gly
183 35 40 45
185 Thr Ile Cys Leu Leu Gly Ile Val Gly Asn Ser Thr Val Ile Phe Ala
186 50 55 60
188 Val Val Lys Lys Ser Lys Leu His Trp Cys Ser Asn Val Pro Asp Ile
189 65 70 75 80
191 Phe Ile Ile Asn Leu Ser Val Val Asp Leu Leu Phe Leu Leu Gly Met
192 85 90 95

```

RAW SEQUENCE LISTING

DATE: 02/12/2002

PATENT APPLICATION: US/10/029,314

TIME: 08:45:08

Input Set : N:\Crf3\RULE60\10029314.txt

Output Set: N:\CRF3\02122002\J029314.raw

```

194 Pro Phe Met Ile His Gln Leu Met Gly Asn Gly Val Trp His Phe Gly
195           100           105           110
197 Glu Thr Met Cys Thr Leu Ile Thr Ala Met Asp Ala Asn Ser Gln Phe
198           115           120           125
200 Thr Ser Thr Tyr Ile Leu Thr Ala Met Thr Ile Asp Arg Tyr Leu Ala
201           130           135           140
203 Thr Val His Pro Ile Ser Ser Thr Lys Phe Arg Lys Pro Ser Met Ala
204 145           150           155           160
206 Thr Leu Val Ile Cys Leu Leu Trp Ala Leu Ser Phe Ile Ser Ile Thr
207           165           170           175
209 Pro Val Trp Leu Tyr Ala Arg Leu Ile Pro Phe Pro Gly Gly Ala Val
210           180           185           190
212 Gly Cys Gly Ile Arg Leu Pro Asn Pro Asp Thr Asp Leu Tyr Trp Phe
213           195           200           205
215 Thr Leu Tyr Gln Phe Phe Leu Ala Phe Ala Leu Pro Phe Val Val Ile
216           210           215           220
218 Thr Ala Ala Tyr Val Lys Ile Leu Gln Arg Met Thr Ser Ser Val Ala
219 225           230           235           240
221 Pro Ala Ser Gln Arg Ser Ile Arg Leu Arg Thr Lys Arg Val Thr Arg
222           245           250           255
224 Thr Ala Ile Ala Ile Cys Leu Val Phe Phe Val Cys Trp Ala Pro Tyr
225           260           265           270
227 Tyr Val Leu Gln Leu Thr Gln Leu Ser Ile Ser Arg Pro Thr Leu Thr
228           275           280           285
230 Phe Val Tyr Leu Tyr Asn Ala Ala Ile Ser Leu Gly Tyr Ala Asn Ser
231           290           295           300
233 Cys Leu Asn Pro Phe Val Tyr Ile Val Leu Cys Glu Thr Phe Arg Lys
234 305           310           315           320
236 Arg Leu Val Leu Ser Val Lys Pro Ala Ala Gln Gly Gln Leu Arg Thr
237           325           330           335
239 Val Ser Asn Ala Gln Thr Ala Asp Glu Glu Arg Thr Glu Ser Lys Gly
240           340           345           350

```

242 Thr

246 <210> SEQ ID NO: 5

247 <211> LENGTH: 26

248 <212> TYPE: DNA

249 <213> ORGANISM: Artificial Sequence

251 <220> FEATURE:

252 <223> OTHER INFORMATION: Description of Artificial Sequence: primer/probe

254 <400> SEQUENCE: 5

255 gggaactcca cggatcatctt cgcggt

26

258 <210> SEQ ID NO: 6

259 <211> LENGTH: 26

260 <212> TYPE: DNA

261 <213> ORGANISM: Artificial Sequence

263 <220> FEATURE:

264 <223> OTHER INFORMATION: Description of Artificial Sequence: primer/probe

266 <400> SEQUENCE: 6

267 tagcgggtcaa tggccatggc gggtcag

26

RAW SEQUENCE LISTING

DATE: 02/12/2002

PATENT APPLICATION: US/10/029,314

TIME: 08:45:08

Input Set : N:\Crf3\RULE60\10029314.txt

Output Set: N:\CRF3\02122002\J029314.raw

```

270 <210> SEQ ID NO: 7
271 <211> LENGTH: 45
272 <212> TYPE: DNA
273 <213> ORGANISM: Artificial Sequence
275 <220> FEATURE:
276 <223> OTHER INFORMATION: Description of Artificial Sequence: primer/probe
278 <400> SEQUENCE: 7
279 ctcctgggca tgcccttcat gatccaccag ctcatgggca atggg          45
282 <210> SEQ ID NO: 8
283 <211> LENGTH: 25
284 <212> TYPE: DNA
285 <213> ORGANISM: Artificial Sequence
287 <220> FEATURE:
288 <223> OTHER INFORMATION: Description of Artificial Sequence: primer/probe
290 <400> SEQUENCE: 8
291 cttctaggcc tgtacggaag tgтта          25
294 <210> SEQ ID NO: 9
295 <211> LENGTH: 27
296 <212> TYPE: DNA
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: Description of Artificial Sequence: primer/probe
302 <400> SEQUENCE: 9
303 gttgtggttt gtccaaactc atcaatg          27
306 <210> SEQ ID NO: 10
307 <211> LENGTH: 37
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: Description of Artificial Sequence: primer/probe
314 <400> SEQUENCE: 10
315 cgcggatcca ttatgtctgc actccgaagg aaatttg          37
318 <210> SEQ ID NO: 11
319 <211> LENGTH: 38
320 <212> TYPE: DNA
321 <213> ORGANISM: Artificial Sequence
323 <220> FEATURE:
324 <223> OTHER INFORMATION: Description of Artificial Sequence: primer/probe
326 <400> SEQUENCE: 11
327 cgcgaattct tatgtgaagc gatcagagtt catttttc          38
330 <210> SEQ ID NO: 12
331 <211> LENGTH: 34
332 <212> TYPE: DNA
333 <213> ORGANISM: Artificial Sequence
335 <220> FEATURE:
336 <223> OTHER INFORMATION: Description of Artificial Sequence: primer/probe
338 <400> SEQUENCE: 12
339 gcgggatccg ctatggctgg tgattctagg aatg          34
342 <210> SEQ ID NO: 13

```

VERIFICATION SUMMARY

DATE: 02/12/2002

PATENT APPLICATION: US/10/029,314

TIME: 08:45:09

Input Set : N:\Crf3\RULE60\10029314.txt

Output Set: N:\CRF3\02122002\J029314.raw